

COMMENT SET 5: SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT



Our Vision Clean Air

September 8, 2006

Peter Strait, Project Manager
 California State Lands Commission
 100 Howe Avenue, Suite 100-South
 Sacramento, California 95825

Regarding: **Venoco Ellwood Marine Terminal 10-Year Lease Renewal DEIR** (SCH No. 2004071075; CSLC EIR No. 743)

Dear Mr. Strait,

The Santa Barbara County Air Pollution Control District (SBCAPCD) appreciates the opportunity to provide comments on the Draft EIR (DEIR) for the above-mentioned project. We have reviewed the Air Quality Section of the DEIR and we have the following detailed comments:

- | | |
|--------------|--|
| SBCAPCD
1 | 1. Page 4.3-9, Table 4.3-6: The Barge Jovanan 89 BHP diesel IC engine, listed as exempt, is no longer exempt because only diesel engines less than 50 HP are exempt from SBCAPCD permits. |
| SBCAPCD
2 | 2. Page 4.3-12, Line(s) 13 and 14: The document states: "The SBCAPCD is required to conduct an investigation if there are five or more complaints at a time." Please insert the following sentence in its place: "It is the policy of the SBCAPCD to conduct an investigation for each odor complaint received." |
| SBCAPCD
3 | 3. Page 4.3-13, Line(s) 23 and 24: The document states: "Natural seeps occur in other locations where they are not captured but escape to the atmosphere, and create odors if H2S is present in the gas." Please change to: "Natural seeps occur in other locations where they are not captured but escape to the atmosphere, and create odors if odorous mercaptans and H2S are present in the gas." |
| SBCAPCD
4 | 4. Page 4.3-14, Bullet 5, Line(s) 12 through 16: Please add: "If no correlating odor complaints are received, Venoco shall receive authorization from the Fire Department or the SBCAPCD prior to restarting the loading operations. If correlating odor complaints are received, within two business days of the receipt of a written report from Venoco describing the cause of the release, the SSRRC technical subcommittee shall review the report and authorize startup upon the showing by Venoco that the cause(s) of the release and appropriate corrective actions have been identified and implemented as approved by the SSRRC." |
| SBCAPCD
5 | 5. Page 4.3-14: Please add additional bulleted items as necessary to include all the remaining requirements for the Barge Jovanan listed in the attached Abatement Order 99-6A Appendix 1 on pages 6 and 7 which are not listed in this EIR document. |

Terece E. Dressler Air Pollution Control Officer
 260 Marin San Antonio Road, Suite A Santa Barbara, CA 93110 www.sbcapcd.org 805 961 8800 805 961 8801 (fax)

- SBCAPCD 6 | 6. Page 4.3-14, Line 24: Please delete "bottom" and replace with "tank floors".
- SBCAPCD 7 | 7. Page 4.3-14, Line 25: Please add the following sentence before the sentence beginning with "As of July ...": "The SBCAPCD determined the source of the odors were hydrocarbon based solvents used to clean the internal surfaces of the tanks during the repair activities."
8. Page 4.3-19, Significance Criteria: The SBCAPCD recommends the following updates to the CSLC air quality significance criteria provided on Page 19 of this Attachment:
- SBCAPCD 8 | a. The SBCAPCD no longer considers localized Carbon Monoxide (CO) hotspots a potential impact because the County has been in attainment of the state CO standard for many years and ambient CO levels have declined significantly.
- SBCAPCD 9 | b. The SBCAPCD also recommends that only daily emission thresholds be used and that the CSLC drop the use of annual thresholds as significance criteria in environmental documents for projects in Santa Barbara County. We have never used 15 tons per year of ROG, NOx or PM10 as significance criteria.
- SBCAPCD 10 | c. Please add the following Health Risk significance thresholds:
- | | Significance Threshold |
|--------------------------|------------------------|
| Cancer risk: | ≥ 10/million |
| Chronic non-cancer risk: | ≥ 1 |
| Acute non-cancer risk: | ≥ 1 |
- SBCAPCD 11 | 9. Page 4.3-20 Mitigation Measure AQ-1 is based on projected emissions from the 88 trip scenario. The emissions were projected by increasing baseline actual emissions (22 trips a day) by a factor of 88/22. The resulting projected emissions (Table 4.3-9) are so far below SBCAPCD permitted levels (based on 88 trips), that the "Project Emissions" in table 4.3-9 appear to have been underestimated. For instance, SBCAPCD Permit 8232-R5 lists NOx permitted emissions of 107 TPY for the tug boat alone. Total "Project Emissions" presented in the EIR based on the 88 trip scenario are estimated at 25.1 TPY. Mitigation Measure AQ-1 limits throughput based on cutting back loadings to bring emissions down to 15 TPY (CSLC significance level). If the mitigation measure were based on higher projected emissions, that loadings would have to be reduced even further. For example, assuming 50 TPY emissions, loadings would have to be reduced to less than 75 trips per year to get below the significance level. Please review the emissions projections and revise the mitigated loadings as appropriate.
- SBCAPCD 12 | 10. Page 4.3-23, Line 24 & 25: Please change this sentence to "SBCAPCD investigations have concluded that only one recent odor event (year 2005) was directly attributed to the FMT and barge."
- SBCAPCD 13 | 11. Page 4.3-24, Line 5: Please insert "based on control efficiency monitoring" between the words "schedule" and "for".

- SBC/APCD 14 | 12. Page 4.3-24, Line 8: Please replace "prevent" with "monitor".
- SBC/APCD 15 | 13. Page 4.3-24, Mitigation Measures, AQ-2b: Please add the following to this measure:
"Following the required shutdown of the loading pumps, identify the necessary actions to be taken by Venoco in order to resume loading oil into the barge, i.e. resume loading into a different barge hold; resume loading at a lower rate."
- SBC/APCD 16 | 14. Page 4.3-24, Line 18: Please replace "trapped" with "adsorbed".
- SBC/APCD 17 | 15. Page 4.3-24, Line 20: Please replace "prevent" with "monitor".
16. Health Risk Assessment:
- SBC/APCD 18 | A. For an operational stationary source risk assessment, the offsite Point of Maximum Impact (PMI) must be reported. This value will be compared to the APCD's significant risk threshold to determine if the project creates a significant risk to the surrounding community. To further clarify, the offsite PMI may be a boundary receptor, grid receptor or a sensitive receptor. No residence or business is required to occupy the offsite PMI. However, the APCD agrees that it is appropriate to present and discuss the risk at the nearest resident.
- SBC/APCD 19 | B. The 70 year (adult resident) exposure duration with the Derived (Adjusted) Method must be used to determine the cancer risk. The 9 year exposure duration is not appropriate for determining the cancer risk for the baseline or from this project. Although the extension of the lease may result in an additional seven years of operation, the lease has been operating for decades. The baseline risk and the new project risk should be determined through the 70 year exposure duration.
- SBC/APCD 20 | C. The electronic files used to perform the health risk assessment (HRA) in HARP should be included in the DEIR. The APCD can not thoroughly review the HRA without these files. For a complete list of required files, please see page 7 of APCD Form-151 (<http://www.sbcapcd.org/eng/dl/app/forms/apcd-151.pdf>).
- SBC/APCD 21 | D. Please clarify if the emissions year used for the baseline risk assessment is 2001 or 2003. Line 10 on page 4.3-15 of the DEIR says the risk assessment was based on emissions year 2001, while Table 4.3-8 and Table 4.3-10 list the emissions year as 2003.
- SBC/APCD 22 | E. The diesel combustion emission factors (excluding diesel particulate matter) used for the risk assessment are from Ventura County Air Pollution Control District's *AB 2588 Combustion Emission Factors* (<http://www.venocd.org/pubs/Engineering/AirToxics/combem.pdf>). The DEIR includes a reference to the South Coast Air Quality Management District's website which contains a copy of the document. For completeness, please explicitly reference Ventura County APCD's document.

Venoco Ellwood Marine Terminal Lease Renewal Project DEIR
Page 3 of 4

SBCAPCD
23

- F. The list of toxic contaminants from diesel combustion in Tables D-17, D-18, D-19, D-20 and D-22 contains some pollutants that are not required to be included in the HRA. Only diesel particulate matter (surrogate for whole diesel exhaust) and pollutants that have acute health impacts (e.g., benzene, formaldehyde, acrolein, toluene, xylene, hydrogen chloride, arsenic, copper, mercury and nickel) should be included in an inhalation risk assessment. Emissions from pollutants that do not cause acute health impacts (e.g., hexane, selenium, zinc) should not be quantified for an inhalation risk assessment as their contribution to the risk is included in the diesel particulate matter-cancer potency factor and/or chronic reference exposure level. Only if a multipathway risk assessment is being done should diesel exhaust be speciated for pollutants that cause cancer and chronic non-cancer risk. The APCD does not recommend a multipathway analysis for diesel exhaust as the cancer and chronic non-cancer risk from inhalation exposure to whole diesel exhaust will outweigh the multipathway cancer risk from the speciated components.

We look forward to receiving responses to our comments. If you have questions regarding the comments please contact me at DE.Butz@sbcapcd.org.

Sincerely,

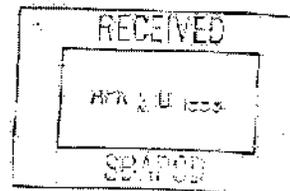


Bobbie Brutz
Public Information and Community Programs Supervisor

Encl: SBCAPCD Abatement Order, April 14, 1999

cc: TEA Chron
Project File (Venoco Ellwood Marine Terminal)
Kevin Drude, Energy Division, SB County P&D
Rob Mullane, City of Goleta
Terry Snyder, SBCAPCD
Brian Shafiritz, SBCAPCD
Michael Goldman, SBCAPCD
Robin Cobbs, SBCAPCD

FINAL A.O.



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4 105 E. Anapamu St., Suite 201
5 Santa Barbara, CA 93101
6 (805) 568-2950 / FAX: (805) 568-2982

7 Attorneys for the Santa Barbara County
8 Air Pollution Control District

9 BEFORE THE HEARING BOARD OF THE AIR POLLUTION
10 CONTROL DISTRICT, COUNTY OF SANTA BARBARA

11 DOUGLAS ALLARD, CONTROL
12 OFFICER, SANTA BARBARA
13 COUNTY AIR POLLUTION
14 CONTROL DISTRICT;

Case No: 99-6(A)

15 vs.

16 ORDER OF ABATEMENT;
17 STIPULATION OF PARTIES

18 VENOCO, INC., as owner and operator
19 of ELLWOOD OIL & GAS
20 PROCESSING PLANT; PLATFORM
21 HOLLY, ELLWOOD MARINE
22 TERMINAL; LEASE 421 AND
23 ASSOCIATED PIPELINES AND
24 FACILITIES

Date: April 14, 1999
Time: 9:30 AM
Place: Board of Supervisors Hearing
Room, 105 E. Anapamu St.,
Santa Barbara, California

25 INTRODUCTION

26 1. On April 7, 1999, PETITIONER DOUGLAS ALLARD, AIR POLLUTION
27 CONTROL OFFICER OF THE SANTA BARBARA COUNTY AIR POLLUTION
28 CONTROL DISTRICT ("District") filed with this Hearing Board a petition for an
Order of Abatement pursuant to Health and Safety Code Section 42451 against
VENOCO, INC. ("Respondent" or "Venoco"). Venoco is the owner and operator of
the Ellwood Oil and Gas Processing Plant located at 7979 Hollister Avenue, Goleta,
California. Venoco also owns and operates Platform Holly and the Ellwood Marine
Terminal. Additionally, Venoco contracts for the operation of the Jovanan Barge,

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1 Department regarding strong odors. These incidents caused concern to the public, the
2 District and the County.

3 8. The Board finds that emissions from the loading of the Barge Jovalen at the
4 Ellwood Marine terminal have resulted in complaints of odors on several occasions.

5 9. The Board finds that Venoco's responses to gas releases on July 27, 1998, and
6 February 23 and March 13, 1999 raises concerns regarding Venoco's adherence to its
7 Emergency Action Plan. The Board finds that Venoco should closely adhere to its
8 Emergency Action Plan.

9 10. The Board finds that the concerns raised by the District and County regarding
10 the age of the Project justify a full safety audit of all facilities in order to determine
11 any specific improvements and operational changes necessary to ensure that the
12 Project does not in the future experience problems of gas releases that adversely
13 impact the public.

14 **ORDER OF ABATEMENT**

15 **[HEALTH & SAFETY CODE § 42451(b)]**

16 11. NOW, THEREFORE, THE BOARD ORDERS that Respondent shall not
17 operate the Ellwood project facilities unless Respondent meets the following
18 requirements:

- 19 a) Safety Audit. Cooperate with and provide all requested documentation and
20 specifications necessary for the performance of a safety audit of the Project, including
21 Platform Holly, the Marine Terminal, the Ellwood Processing Plant, Lease 421, and
22 Line 96, by the System Safety and Reliability Review Committee ("SSRRC"). The
23 audit of Platform Holly and the Marine Terminal will be coordinated with the audit to
24 be performed by the State Lands Commission; however, such coordination will not be
25 a basis to delay or defer the audit to be prepared by the County and the District.
26 Venoco shall provide any information necessary for this audit to the SSRRC within 30
27 days of receipt of a request from SSRRC. The audit, including the request and
28 recommendations, shall follow normal SSRRC protocol, including participation by

7 COUNSEL
of the State of Louisiana
100 East Adams Street
Louisiana, LA 70112
1-504-588-2030

1 Venoco. Venoco shall comply with the recommendations of the Safety Audit, unless
2 Venoco appeals a recommendation to the Hearing Board within 10 days of receipt of
3 the final issuance of the Audit and the Hearing Board determines that the
4 recommendation should be modified or not be implemented.

5 b) Safety, Inspection, Maintenance and Quality Assurance Plan ("SIMOAP"):

6 Venoco shall submit, have approved and implement a Safety, Inspection, Maintenance
7 and Quality Assurance Plan for all facilities. Venoco shall submit the plan within 90
8 days of April 14, 1999 and obtain final approval by October 14, 1999. The Director of
9 Planning and Development may extend the final approval date for good cause. Such
10 extensions shall not be beyond January 14, 2000. The plan may only be modified after
11 proposed changes are reviewed by the SSRRC. The Plan shall be reviewed by Venoco
12 every two years and thereupon updated as necessary. The plan shall be updated more
13 frequently by Venoco if requested by SSRRC. Venoco shall respond to any SSRRC
14 comments on the Plan within 30 days of receipt of such comments.

15 c) Significant Gas Releases: Shut Down and Restart Protocol: Venoco shall
16 suspend any production and drilling operations, except those which are corrective,
17 protective, or mitigative, immediately in the event of any "Event" described in
18 Sections I and II of Appendix I. Venoco shall suspend any operations of the Barge
19 Jovanan, except those which are corrective, protective, or mitigative, immediately in
20 the event of any "Event" described in Section III of Appendix I. This condition does
21 not address Venoco's rights and obligations regarding continuing to operate and
22 contain gas from the Sect. Production and drilling operations that are thereby
23 suspended shall not resume until adequate corrective measures have been taken and
24 authorization of resumption of operations has been made, all as provided in Appendix
25 I.

26 d) Reconfiguration: 4 inch line. Venoco has submitted an application to the
27 District for reconfiguration of the Ellwood Processing Plant and Platform Holly to
28 dedicate the four inch pipeline from Platform Holly to the Ellwood Processing Plant to

COUNCIL
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105 East Alhambra Street
Sacramento, CA 95811
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1 continuously function to flare natural gas from Platform Holly. Within 30 days of
 2 receiving approval of all agency permits required for the four inch pipeline
 3 reconfiguration, Venoco shall install, test and continuously maintain said
 4 reconfiguration according to the permit issued by the District. This system shall be
 5 operated until commencement of operation of the Platform Holly flare system
 6 described in paragraph (e), below.

7 e) Platform Holly Flare System Permitting. By April 30, 1999, file applications
 8 for and diligently pursue all necessary permits with all regulatory bodies with
 9 jurisdiction for the installation of a flare system on Platform Holly to flare all gases
 10 from Platform Holly's vent stack in compliance with District Rule 325(E) and
 11 Regulation VIII; and take all necessary and proper steps to diligently provide
 12 information, clarifications, fees and other support to receive all necessary permits from
 13 all such regulatory bodies. The Control Officer may extend the filing date to June 2,
 14 1999, for good cause, as determined by the Control Officer.

15 f) Platform Holly Flare System Installation. Install a flare system on Platform
 16 Holly that complies with District Rule 325(E) and Regulation VIII within eight months
 17 of April 14, 1999. In the event that it takes longer than eight months to receive all
 18 necessary permits from all regulatory bodies and install the flare system, Venoco shall
 19 return to the Hearing Board to request an extension.

20 g) Facility Improvement to Address Odors. In order to facilitate compliance with
 21 Health and Safety Code section 41700 and District Rule 303, immediately implement
 22 the following:

23 (i) when loading the Barge Jovalan after volumes in the Barge reach 40,000
 24 barrels of crude oil, the loading rate shall not exceed 2,100 barrels per hour.

25 (ii) when loading the Barge Jovalan, the vapor recovery unit vessel V-4 shall be
 26 operated no warmer than negative 150 degrees Fahrenheit.

27 (iii) test the caustic solution used on the Barge Jovalan and replace it with H_2S .
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 CITY OF LOS ANGELES
 DEPARTMENT OF SANITATION
 105 EAST ANGELES AVENUE
 LOS ANGELES, CALIF. 90012
 (213) 684-7800

STIPULATION TO ABATEMENT ORDER

Pursuant to Health and Safety Code section 42451(b), the District and Respondent hereby stipulate to the above Order of Abatement and consent to the terms and conditions set forth therein.

This stipulation is executed by the parties on the dates indicated below, in the County of Santa Barbara, State of California.

DOUGLAS W. ALLARD
CONTROL OFFICER
Santa Barbara County Air Pollution
Control District

VENOCO, INC.
RESPONDENT

By: Peter C. Cantle
Peter C. Cantle
Manager, General Source
Division
April 8, 1999

By: [Signature]
[Signature]
[Signature]

April 8, 1999

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IN COUNSEL
County of Santa Barbara
101 Elm, Air Quality Center
Santa Barbara, CA 93101
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APPENDIX 1

Venoco Ellwood Onshore, Platform Holly & Barge Jettison Facilities
 Significant Gas Releases - Shutdown and Restart Protocol
 Page 1 of 7

Event	Required Actions	Compliance Mechanisms	Restart Criteria
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General Notes:

- None of the protocol requirements specified herein shall supersede the Venoco Ellwood Santa Barbara County-approved EAP, unless applicable reporting requirements, regulations, or laws.
- Any "Event" listed herein requires that Venoco call 911.
- This protocol does not require Venoco to shutdown, or preclude Venoco from restarting, any safety or emission control equipment.

1. Ellwood Onshore Facility (EOF)

Event	Required Actions	Compliance Mechanisms	Restart Criteria
A) Any Atmospheric Release from the Storage Tank System (Condensate, Storm and Produced Water Tanks - etc.)	<ol style="list-style-type: none"> Shutdown EOF Condensate and gas processing systems if any single venting event exceeds one (1) minute, or an aggregate of 5 events occur within 15 consecutive minutes. Upon shutdown of EOF, shut down Platform Holly Operations for Condensate and Gas Production/Reinjection. Venoco to identify cause of tank release and submit a comprehensive written report to the SSR/IC. 	<p>Existing</p> <ol style="list-style-type: none"> Existing EOF Vapor Recovery Unit ("VRU") Suction Pressure Recorder Alarm needs to be reset to this. <p>Additional</p> <ol style="list-style-type: none"> Install proximity switches and alarms to each tank's vent hatch by 30 days after the effective date of the Maintenance Order ("MO"). Tank vent hatch alarms connected to APCD DAS by 90 days after the effective date of the MO. 	<ol style="list-style-type: none"> Determine cause of tank release. If due to condenser power failure, and no correlating neighborhood complaints, then the EOF shall not restart until authorized by Fire or APCD. If due to other cause, or correlating neighborhood complaints, then within 7 business days of receipt of the Venoco report the SSR/IC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the release and the appropriate corrective action(s) have been identified, and will be implemented, as approved by the SSR/IC.

Venoco Ellwood Onshore, Platform Holly & Marge, Jovanan Facilities
 Significant Gas Releases - Shutdown and Restart Protocol
 Page 2 of 7

Event	Required Actions	Compliance Mechanisms	Restart Criteria
B) Any Uncontrolled LCoCat Exhaust Atmospheric Release	<ol style="list-style-type: none"> 1. Shut down EOP gas processing system. 2. Holly gas to gas re injection with no release to atmosphere. 3. Venoco to identify cause of LCoCat release and submit a comprehensive written report to the SSRRC. 	Existing <ol style="list-style-type: none"> 1. H-205 & LuCat Shutdown Interlock for EOP. 2. Immediate communication required with Holly to go to re injection. 3. Additional Install at Holly an EOP Gas Valve "Closed" indicator (to minimize reaction time for re injection) by 30 days after the effective date of the AU. 	<ol style="list-style-type: none"> 1. Determine cause of release. 2. For any cause, if no correlating neighborhood complaints, then EOP shall not restart until authorized by Fire or APCD. 3. If correlating neighborhood complaints are received, then within 2 business days of receipt of the Venoco report the SSRRC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the release and the appropriate corrective action(s) have been identified, and will be implemented, as approved by the SSRRC.
C) Any Unplanned or Unforeseen In-plant H ₂ S Alarm at ≥ 10 ppmv (Venoco must call APCD for Fire during non-business hours) before initiating maintenance activities that may generate releases or "planned or unforeseen" releases).	<ol style="list-style-type: none"> 1. Identify cause of alarm. 2. If due to actual unplanned or unforeseen release of H₂S (and/or liquid or vapor as confirmed by Venoco, District or county personnel) - shut down EOP & Holly Oil and Gas production. 3. If shut down due to an unplanned release then Venoco shall submit comprehensive written report to the SSRRC. 	Existing <ol style="list-style-type: none"> 1. Venoco operators responsible for documenting alarms. 3. Additional Upgraded alarm systems to include automatic alarm time by schedule determined in AD condition for Facilities Monitoring. 	<ol style="list-style-type: none"> 1. Determine cause of release. 2. For any cause, if no correlating neighborhood complaints, then EOP shall not restart until authorized by Fire or APCD. 3. If correlating neighborhood complaints are received, then within 2 business days of receipt of the Venoco report the SSRRC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the release and the appropriate corrective action(s) have been identified, and will be implemented, as approved by the SSRRC.

Venoco Ellwood Outskore, Platform Holly & Barge Javalan Facilities
 Significant Gas Releases - Shutdown and Restart Protocol
 Page 3 of 7

Event	Required Actions	Compliance Mechanisms	Restart Criteria
<p>(B) Any Plant Shutdown Triggered Automatically by the In-plant H2S, LEL, or Fire Detectors</p>	<ol style="list-style-type: none"> 1. Identify cause of alarm/shutdown, and release point (if any). 2. Ensure safe shut-down of H2S & Holly Oil and Gas production. 3. Venoco shall submit a comprehensive written report of the cause, and release (if any) to SSRRC. 	<p><u>Existing</u></p> <ol style="list-style-type: none"> 1. Venoco operators responsible for documenting alarms. Additional 2. Upgraded alarm systems to include automatic alarm time by schedule determined in AO condition for Facilities Monitoring. 	<ol style="list-style-type: none"> 1. Determine cause of alarm and release (if any). 2. For any cause, if no correlating neighborhood complaints, then EOF shall not restart until authorized by Fire or APCA. 3. If correlating neighborhood complaints are received, then within 2 business days of receipt of the Venoco report the SSRRC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the release and the appropriate corrective action(s) have been identified, and will be implemented, as approved by the SSRRC.

Venoco Ellwood Onshore, Platform Holly & Barge Javalan Facilities
 Significant Gas Releases - Shutdown and Restart Protocol
 Page 4 of 7

Event	Required Actions	Compliance Mechanisms	Restart Criteria
<p>3. Platform Holly</p> <p>A) Holly Vent Stack Venting Due to Electrical Power Outage</p>	<p>Required Actions</p> <ol style="list-style-type: none"> 1. Ensure Holly gas and oil production shuts down properly. 2. Report this to SSRRC by next business day. 	<p>Compliance Mechanisms</p> <p>Existing</p> <ol style="list-style-type: none"> 1. Power outage causes platform shutdown. 2. Holly Vent Stack Meter ("VSM") checks release time (if any). VSM indicates release at 20 ft³/min flow rate. <p>Additional</p> <ol style="list-style-type: none"> 1. Upgraded VSM per the <i>Facilities Monitoring</i> condition of the AO. 	<p>Restart Criteria</p> <ol style="list-style-type: none"> 1. If no correlating neighborhood complaints, then Holly and EOF shall not restart until authorized by Fire or APCD. 2. If correlating neighborhood complaints are received, then within 2 business days of receipt of the Venoco report the SSRRC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the release have been identified, and will be implemented, as approved by the SSRRC.
<p>B) Holly Vent Stack Venting Due to Process Upset or Equipment Failure</p>	<ol style="list-style-type: none"> 1. For any event lasting longer than 60 seconds, initiate shut down of Holly and EOF gas and oil production. 2. Venoco to identify what, why and corrective action for upset or equipment failure. Also document total time and volume of gas vented and submit a comprehensive written report to the SSRRC. 	<ol style="list-style-type: none"> 1. Holly VSM clock. 	<ol style="list-style-type: none"> 1. If no correlating neighborhood complaints, then Holly and EOF shall not restart until authorized by Fire or APCD. 2. If correlating neighborhood complaints are received, then within 2 business days of receipt of the Venoco report the SSRRC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the release have been identified, and will be implemented, as approved by the SSRRC.

Venoco Ellwood Onshore, Platform Holly & Barge Jovanan Facilities
 Significant Gas Release - Shutdown and Restart Protocol
 Page 5 of 7

Event	Required Actions	Compliance Mechanisms	Restart Criteria
III. Barge Jovanan Event A) Any Hold Pressure Safety Valve that Vents to Atmosphere	Required Actions 1. Shut down barge loading. 2. Venoco to determine cause for venting and submit a comprehensive written report to the SSRRC.	Compliance Mechanisms Existing 1. Barge operator manually records vacuum reading from VRTU suction scrubber. This is not necessarily indicative of whether upstream hold pressures are above relief setpoint. Additional 2. Barge operator to install plastic bags to indicate (alarm) imminent hold venting. 3. Venoco to also monitor and record hold pressures. Hold pressures shall be monitored by Operator or Venoco every 30 minutes during loading, and for 30 minutes after loading is terminated. 4. Failure to hold pressure exceeds its PSV atmospheric release pressure setpoint. 5. Venoco to transmit this record to APCD within 2 business days after load completed.	Restart Criteria 1. Cause of hold pressure exceedance determined. 2. Hold pressures return to atmospheric pressure (release stopper). 3. Normal operating level on VRTU. 4. If no continuing complaints, Crude oil loading into Jovanan shall not restart until authorized by Fire or APCD. 5. If continuing neighborhood complaints are received, then within 2 business days of receipt of the Venoco report the SSRRC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the rerel and the appropriate corrective action(s) have been identified, and will be implemented, as approved by the SSRRC.

Venoco Ellwood Onshore, Platform Holly & Barge Jovalan Facilities
 Significant Gas Releases - Shutdown and Restart Protocol

Page 6 of 7

Event	Required Actions	Compliance Mechanisms	Restart Criteria
B) VRU Compressor Relief Valve Opens to Atmosphere	<ol style="list-style-type: none"> 1. Shut down large loading 2. Venoco to determine cause for venting and submit a comprehensive written report to the SSRRC. 	<p><u>Leashing</u></p> <p>None.</p> <p><u>Additional</u></p> <ol style="list-style-type: none"> 1. Install a pressure monitor and recording device. 2. Venoco to transmit this record to APCD within 2 business days after load completed. 	<ol style="list-style-type: none"> 1. Cause of relief determined. 2. Relief valve resets (release stopped). 3. Normal operating Jovalan VITC. 4. If no correlating complaints, Crude oil loading into Jovalan shall not restart until authorized by Fire or APCD. 5. If correlating neighborhood complaints are received, then within 2 business days of receipt of the Venoco report the SSRRC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the release and the appropriate corrective action(s) have been identified, and will be implemented, as approved by the SSRRC.
C) VRU Exhaust to ICE Bypass Valve VRU Exhibits to Atmosphere	<ol style="list-style-type: none"> 1. This valve shall be "car sealed" closed. 	<ol style="list-style-type: none"> 1. Car Sealed Closed. 2. Car seal may only be removed upon notification and approval of APCD. 	<p>Should not cause a shutdown.</p>

Venoco Ellwood Onshore, Platform Holly & Barge, Juvayan Facilities
 Significant Gas Releases - Shutdown and Restart Protocol
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Event	Required Actions	Compliance Mechanisms	Restart Criteria
<p>D) VDU Exhaust (LEL Bypass Valve Actuated) (VRU Exhaust to Atmosphere)</p>	<ol style="list-style-type: none"> 1. Shut down barge loading. 2. Venoco to determine cause for LEL sensor tripped shutdown, and submit a comprehensive written report to the SSRRC. 	<p>Existing</p> <ol style="list-style-type: none"> 1. Make-up alarm system & recordkeeping capabilities. Additional 2. Venoco to provide SSRRC information to describe this system by 10 days after the effective date of the AD. 	<ol style="list-style-type: none"> 1. Cause of LEL trip determined. 2. LEL event stops and is reset (release stopped). 3. Normal operating levels VRU. 4. If no correlating complaints, Crude oil loading into Juvayan shall not restart until authorized by Fire or APCD. 5. If correlating neighborhood complaints are received, then within 2 business days of receipt of the Venoco report the SSRRC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the release have been identified, and will be implemented, as approved by the SSRRC.
<p>E) Vessel V-4 Temperature Warmer than 150 °F for More than 5 Minutes</p>	<ol style="list-style-type: none"> 1. Shut down barge loading. 2. Venoco to determine cause for temperature exceedance and submit a comprehensive written report to the SSRRC. 	<p>Existing</p> <ol style="list-style-type: none"> 1. V-4 equipped with local temperature indicator. Additional 2. Venoco and operator to manually observe and record the V-4 temperature every 10 minutes. 3. Venoco to transmit this record to APCD within 2 business days after load completed. 	<ol style="list-style-type: none"> 1. Cause determined. 2. Proper V-4 temperature restored. 3. Normal operating levels VRU. 4. If no correlating complaints, Crude oil loading into Juvayan shall not restart until authorized by Fire or APCD. 5. If correlating neighborhood complaints are received, then within 2 business days of receipt of the Venoco report the SSRRC technical subcommittee shall review the report and authorize start-up upon showing by Venoco that the cause(s) of the release and the appropriate corrective action(s) have been identified, and will be implemented, as approved by the SSRRC.

RESPONSE TO COMMENT SET 5: SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT

- 1 SBCAPCD-1 The noted change has been made in Table 4-3-6 – the diesel engine
2 was moved into the Permitted Equipment Category (see page 4-27).
- 3 SBCAPCD-2 The requested change has been made in the text to state that each
4 odor complaint is investigated (see page 4-28).
- 5 SBCAPCD-3 The requested change has been made in the text on page 4-29.
- 6 SBCAPCD-4 The requested change has been made in the text on page 4-29.
- 7 SBCAPCD-5 The remaining conditions of the Abatement Order have been added to
8 the text (see page 4-29).
- 9 SBCAPCD-6 The requested change has been made in the text on page 4-30.
- 10 SBCAPCD-7 The requested change has been made in the text on page 4-30.
- 11 SBCAPCD-8 Thank you for this information. Although the analysis confirms that CO
12 will not be an issue in any event, the CSLC will continue to consult with
13 the SBCAPCD during the preparation of environmental documents for
14 projects in Santa Barbara County.
- 15 SBCAPCD-9 The use of a daily emission threshold has little applicability to
16 evaluating potential air quality impacts from the EMT. Daily emissions
17 associated with the proposed Project do not change from baseline, only
18 the number of potential barge trips and annual emissions. Thus, when
19 daily significance thresholds are applied to the incremental change
20 between baseline and the proposed Project, which is zero on a peak
21 daily basis, the result is a finding of no impact, even though annual
22 emissions would increase.
- 23 To address the potential impact to air quality associated with more
24 frequent barge trips over baseline that could occur with the proposed
25 Project, it is necessary to utilize a longer term significance criterion. The
26 SBCAPCD CEQA Guidelines that were in effect at the time the DEIR
27 was prepared stipulated that air quality impacts could be considered
28 significant if annual emissions were sufficient to trigger New Source
29 Review requirements under the SBCAPCD's rules.

- 1 The SBCAPCD peak day thresholds were used to evaluate potential
2 impacts associated with the proposed Project. To address this issue of
3 long term emission increases associated with a potential increase in the
4 number of annual barrage trips, the DEIR adopted the SBCAPCD's
5 significant source definition under Rule 201, which would set the
6 significance criterion at 25 tons/year for any regulated pollutant.
- 7 SBCAPCD-10 The SBCAPCD significance criteria are already stated in text form in
8 Section 4.3.3. Several changes were made to the text of the health risk
9 significance criteria to mention both chronic and acute hazard indexes
10 (see pages 4-30 and 4-31).
- 11 SBCAPCD-11 The Project emissions were estimated based on the increase of the
12 barge trips from 23 to 88, at the current emissions level per trip.
13 Currently, the tug and other emitting sources operate at a level that is
14 significantly lower than the permitted levels although the level of
15 operation (number of trips) is only 1/3 of the maximum number of trips
16 of 88.
- 17 The text and the calculations have been changed to reflect the worst
18 case scenario of the barge going north to the Shore Terminal in Contra
19 Costa County (see pages 4-32 and 4-33). The mitigation was adjusted
20 to limit the number of trips to result in below the threshold project
21 emissions.
- 22 SBCAPCD-12 The requested change has been made in the text on page 4-35.
- 23 SBCAPCD-13 The requested change has been made in the text on page 4-35.
- 24 SBCAPCD-14 The requested change has been made in the text on page 4-35.
- 25 SBCAPCD-15 The requested change has been made in the text of the Mitigation
26 Measure AQ-2b on pages 4-35 and 4-36.
- 27 SBCAPCD-16 The requested change has been made in the text on page 4-36.
- 28 SBCAPCD-17 The requested change has been made in the text on page 4-36.
- 29 SBCAPCD-18 The PMI for the proposed Project is located in the offshore area at the
30 mooring of the barge. A 70 year exposure cannot be logically supported

- 1 at that location because there is no potential for chronic exposure at
2 that location. Only the acute maximum hour Hazard Index has been
3 reported at that location because a vessel could be located there during
4 the maximum emissions hour.
- 5 SBCAPCD-19 The risk reported in the DEIR was recalculated for the 70-year
6 exposure, for those locations where there is any remote chance that
7 long-term public exposure can be justified, i.e., onshore and not at the
8 offshore mooring location. The maximum theoretical risk for the
9 proposed Project occurs offshore, where no population could be
10 constantly exposed to emissions. Therefore, the maximum onshore
11 risk estimate was used to determine worst-case long-term public health
12 impacts.
- 13 SBCAPCD-20 The requested files will be provided to the SBCAPCD along with the
14 Final EIR.
- 15 SBCAPCD-21 The year of emissions was 2003, as was corrected on page 4.3-15 (see
16 FEIR page 4-30).
- 17 SBCAPCD-22 The requested clarification of the reference has been made to Appendix
18 D of the EIR.
- 19 SBCAPCD-23 The calculation was redone for the specified pollutants. Potential health
20 risks remain below the applicable SBCAPCD significance criteria.